## **DEPARTMENT OF ENVIRONMENT QUALITY**

#### DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

#### **FACT SHEET**

# GENERAL PERMIT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE STORMWATER

Permit No. NCG150000 Date: June 9, 2017

#### **BACKGROUND**

Activities, such as material handling and storage, equipment maintenance and cleaning, industrial processing or other operations that occur at industrial facilities are often exposed to stormwater. The runoff from these areas may discharge pollutants directly into nearby waterbodies or indirectly via storm sewer systems, thereby degrading water quality.

In 1990, the U.S. Environmental Protection Agency (EPA) developed permitting regulations under the National Pollutant Discharge Elimination System (NPDES) to control stormwater discharges associated with eleven categories of industrial activity. NPDES permitting authorities, which may be either EPA or a state environmental agency, issue stormwater permits to control runoff from these industrial facilities.

#### TYPES OF DISCHARGES COVERED

The requirements in this permit apply to stormwater discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes in Major Group 45, specifically to those airports that do not routinely perform deicing or anti-icing operations. Types of operations covered include

- 1. Air transportation, scheduled, and air courier (SIC 4512 and 4513);
- 2. Air transportation, non-scheduled (SIC 4522);
- 3. Airports, flying fields, except those maintained by aviation clubs:
- 4. Airport terminal services including: air traffic control, except government; aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; and hangar operations; and
- 5. Airport and aircraft service and maintenance including: aircraft cleaning and janitorial service; aircraft servicing/repairing, except on a factory basis; vehicle maintenance shops (including vehicle and equipment rehabilitation mechanical repairs, painting, fueling, lubrication); and material handling facilities.

Facilities and products in this group fall under the following categories, all of which require coverage under an industrial stormwater permit:

- 1. Servicing, repairing, or maintaining aircraft and ground vehicles.
- 2. Equipment cleaning and maintenance (including vehicle and equipment rehabilitation mechanical repairs, painting, fueling, lubrication).
- 3. Deicing/anti-icing operations which conduct the above described activities.

The operator and the tenants of the airport that conduct industrial activities as described above and which have stormwater discharges are required to apply for coverage under an NPDES stormwater permit for the discharges from their areas of operation. The airport management and tenants of the airport are encouraged to apply as co-permittees under a permit, and to work in partnership in the development and implementation of a stormwater pollution prevention plan.

Non-stormwater discharges, including discharges from aircraft, ground vehicle and equipment wash waters, dry weather discharges from airport deicing/anti-icing operations, and dry weather discharges resulting from runway maintenance are not required to obtain coverage under an industrial stormwater permit. Dry weather discharges are generated from processes other than those described in the definition of stormwater. The definition of stormwater includes stormwater runoff, snow melt runoff, and surface runoff and drainage.

#### GEOGRAPHIC AREA(S) COVERED BY THIS GENERAL PERMIT

Discharges covered by this General Permit are located at any place within the political boundary of the State of North Carolina. Discharges located on the Cherokee Indian Tribal Reservation are subject to permitting by the US Environmental Protection Agency and are not covered by this General Permit.

#### **RECEIVING WATERS**

Receiving waters include all surface waters of North Carolina or municipal separate storm sewer systems conveying stormwater to surface waters.

#### CHARACTERISTICS OF DISCHARGED STORMWATER

Pollutants conveyed in stormwater discharges from air transportation facilities will vary. Generally, the concern with the use of ethylene and propylene glycols is that they exert high oxygen demands when released into receiving waters. Additionally, the concentration of nitrogen and possibly ammonia are the concern with the respect to deicing/anti-icing operations where urea is used. There are a number of factors that influence to what extent industrial activities and significant materials can affect water quality, including:

- Geographic location
- Topography
- Hydrogeology
- Extent of impervious surfaces (e.g., concrete or asphalt)
- Type of ground cover (e.g., vegetation, crushed stone, or dirt)
- Outdoor activities (e.g., material storage, loading/unloading, vehicle maintenance)
- Size of the operation
- Type, duration, and intensity of precipitation events

The activities, pollutant sources, and pollutants detailed in Table 1 are commonly found at air transportation facilities.

Table 1. Common Activities, Pollutants Sources, and		
Associated Pollutants at Air Transportation Facilities		
Activity	Pollutant Source	Pollutant
Aircraft deicing/anti-	Runoff of spent deicing chemicals (e.g.,	Biochemical oxygen demand
icing	ethylene glycol or propylene glycol) from	(BOD)
	aircraft exteriors	
Runway deicing/anti-	Runoff of spent deicing chemicals (e.g.,	BOD, nitrogen, ammonia
icing	ethylene or propylene glycol, urea, potassium	
	or sodium acetate, potassium or sodium	
	formate) from deicing areas	
Aircraft servicing	Spills or leaks during servicing	Engine oil, hydraulic fluid,
		fuel, lavatory waste
Aircraft fueling	Spills and leaks during fuel transfer, spills	Jet fuel, fuel additives, oil,
	due to "topping off" tanks, runoff from	lubricants, heavy metals
	fueling areas, washdown of fueling areas,	
	leaking storage tanks	
Aircraft, ground vehicle,	Spills and leaks during maintenance	Engine oils, hydraulic fluids,
and equipment		transmission oil, radiator
maintenance and		fluids, and chemical solvents
washing		
	Disposal of waste parts	Batteries, oil, fuel filters,
		oily rags
	Spent washwater	TSS, metals, fuel, hydraulic
		fluid, oil, lavatory waste
Runway maintenance	Materials removed from runway surface	Tire rubber, oil and grease,
		paint chips, jet fuel
	Chemicals used to clean the runway surface	Chemical solvents

#### PROPOSED DISCHARGE CONTROLS AND LIMITATIONS

Common requirements for coverage under an industrial stormwater permit include development of a written stormwater pollution prevention plan (SWPPP), implementation of control measures, and submittal of a request for permit coverage, referred to as the Notice of Intent or NOI. The SWPPP is a written assessment of potential sources of pollutants in stormwater runoff and control measures that will be implemented at the facility to minimize the discharge of these pollutants in runoff from the site. These control measures include site-specific best management practices (BMPs), maintenance plans, inspections, employee training, and reporting. The procedures detailed in the SWPPP must be implemented by the facility and updated as necessary, with a copy of the SWPPP kept on-site. The industrial stormwater permit also requires collection of visual, analytical, and/or compliance monitoring data to determine the effectiveness of implemented BMPs.

The following are specific requirements of the Plan:

1. The permittee must prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include Best Management Practices (BMPs), economically reasonable and appropriate practices, that are selected, designed, installed, implemented and maintained in accordance with good engineering practices to eliminate or reduce pollutants in the permittee's discharge. The SWPPP must:

- a. Identify all potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges;
- b. Describe and ensure implementation of practices used to eliminate or reduce pollutants in stormwater discharges; and
- c. Ensure compliance with the terms and conditions of this permit.

#### 2. Contents of the SWPPP

- a. The Plan shall include a list identifying each area where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; intermediate products, by-products, final products and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of raw material, intermediate products, final products and waste products.
- b. The Plan shall include a list of the name(s) of all surface waters that receive discharges from the permittee's site. The permittee must provide the size and description of wetlands or other special aquatic sites that may receive discharges from the airport. If there are discharges through any publicly owned or operated storm sewer system, the Plan must identify the publicly owned or operated storm sewer system.
- c. The Plan shall include the identity of any receiving water into which the permittee discharges.
- d. The Plan shall include a list and locations where reportable spills or leaks of pollutants that have occurred at the facility during the three previous years.
- e. The Plan shall include the location(s) and/or descriptions where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s).
- f. For each area where industrial materials or activities are exposed to stormwater, the Plan shall include a narrative description of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices. The Plan shall include a narrative description of the potential pollutants which could be expected to be present in the stormwater discharge from each outfall.
- g. The Plan shall describe and assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If deicing chemicals are used, the permittee must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or estimated. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Commercial tenants or other operations that conduct deicing operations must provide the above information to the airport authority

for inclusion in the airport authority's Plan. The pollutant list must include all significant materials, including any hazardous substances or oil handled, treated, stored, or disposed of that have been exposed to stormwater in the 3 years prior to the date the Plan was prepared or amended.

- h. Site Plan. The site plan shall provide a description of the physical facility and the potential pollutant sources which may be expected to contribute to contamination of stormwater discharges. The site plan shall contain the following:
  - (i) The size of the property in acres.
  - (ii) A general location map (USGS quadrangle map or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters within 1 mile of the site, the name of the receiving water(s) to which the stormwater outfall(s) discharges, or if the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters, and accurate latitude and longitude of the point(s) of discharge.
  - (iii) A site map drawn to scale (including a distance legend) showing: the site property boundary, on-site and adjacent surface waters and known wetlands, industrial activity areas (including storage of materials, disposal areas, process areas, loading and unloading areas, storage tanks, fueling stations, vehicle and equipment maintenance and/or cleaning areas, machinery, access roads and tracks, transfer areas for substances in bulk, locations used for the treatment, storage or disposal of wastes), locations of all stormwater conveyances including ditches, pipes and swales; stormwater inlets and outfalls, building locations, locations of all existing structural and source control BMPs, the location and extent of significant structures and impervious surfaces, and the percentage of each drainage area that is impervious) and the drainage areas for each outfall.
  - (iv) Locations of any storage piles containing salt used for deicing or other commercial or industrial purposes. Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes, must be enclosed or covered to prevent exposure to precipitation. The permittee must implement appropriate measures (e.g., good housekeeping, diversions, and/or containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered only if stormwater from the pile is not discharged directly or indirectly to waters of the United States or discharges from the piles are authorized and controlled under another NPDES permit.
  - (v) Locations of aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- i. The Plan shall contain a narrative description of the best management practices employed which control or minimize the exposure of significant materials to stormwater, including structural and nonstructural measures. The Plan shall describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to stormwater.

- j. Feasibility Study. The Plan shall include a review of the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to stormwater. Wherever practical, the permittee shall prevent exposure of all storage areas, material handling operations, and manufacturing or fueling operations. In areas where elimination of exposure is not practical, the Plan shall document the feasibility of diverting stormwater runoff away from areas of potential contamination.
- k. Secondary Containment Requirements and Records. Secondary containment is required for: bulk storage of liquid materials; storage of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals; and storage of hazardous substances, to prevent leaks and spills from contaminating stormwater runoff. A table or summary of all such tanks and stored materials and their associated secondary containment areas shall be maintained. If the secondary containment devices are connected directly to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices (which shall be secured closed with a locking mechanism), and any stormwater that accumulates in the containment area shall be at a minimum visually observed for color, foam, outfall staining, visible sheens and dry weather flow, prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated by the material stored within the containment area. Records documenting the individual that makes the observation, the description of the accumulated stormwater, and the date and time of the release shall be kept for a period of five years.
- 1. BMP Summary. The BMP Summary shall include a written record of the specific rationale for installation and implementation of the selected site BMPs. The BMP Summary shall be reviewed and updated annually.
- m. Non-stormwater discharges to waters of the United States that are not authorized by an NPDES permit are unlawful and must be eliminated. The Plan must include a certification that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-stormwater, and that all unauthorized discharges have been eliminated. The permittee shall re-certify annually that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. The certification statement will be signed in accordance with the requirements found in Part III, General Conditions, Section B, Paragraph 5 and must include:
  - (i) The date of any testing and/or evaluation,
  - (ii) A description of the evaluation criteria or testing method used,
  - (iii) A list of the outfalls or onsite drainage points that were directly observed during the test,
  - (iv) A description of the results of any test and/or evaluation for the presence of nonstormwater discharges, i.e., identification of unauthorized discharge(s) origin and composition,
  - (v) The action(s) taken to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was rerouted to

sanitary, or an NPDES permit application was submitted for a cooling water discharge.

- Spill Prevention and Response Plan. The Spill Prevention and Response Plan (SPRP) n. shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel (or the team) responsible for implementing the SPRP shall be identified in a written list incorporated into the SPRP. A responsible person shall be on-site during facility operations that have the potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations. The SPRP must be site stormwater specific. Therefore, an oil Spill Prevention Control and Countermeasure plan (SPCC) may be a component of the SPRP, but may not be sufficient to completely address the stormwater aspects of the SPRP. The common elements of the SPCC with the SPRP may be incorporated by reference into the SPRP. Response procedures must include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Employees who may cause, detect or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. Include contact information for individuals and agencies that must be notified in the event of a spill in the Plan and in other locations where it will be readily available.
- o. Preventative Maintenance and Good Housekeeping Program. A preventative maintenance and good housekeeping program shall be developed and implemented. The program shall list all stormwater control systems, stormwater discharge outfalls, all onsite and adjacent surface waters and wetlands, industrial activity areas (including material storage areas, material handling areas, disposal areas, process areas, loading and unloading areas, and haul roads), all drainage features and structures, and existing structural BMPs. The program shall establish schedules of inspections, maintenance, and housekeeping activities of stormwater control systems, as well as facility equipment, facility areas, and facility systems that present a potential for stormwater exposure or stormwater pollution. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program. Timely compliance with the established schedules for inspections, maintenance, and housekeeping shall be recorded in writing and maintained.
- p. Employee Training. The Plan shall include a stormwater employee and commercial tenant training program. The permittee must include a schedule for all types of necessary training. All employees and commercial tenants who work in areas where industrial materials or activities are exposed to stormwater, or are responsible for implementing activities identified in the Plan (e.g., inspectors, maintenance personnel), must participate in annual training. Training must cover the components and goals of the Plan, and include spill response, good housekeeping, material management practices, and BMP operation and maintenance.
- q. Responsible Party. The Plan shall identify staff members (by name or title) responsible for developing, implementing, maintaining, revising and ensuring compliance with the Plan. Specific responsibilities of each staff individual must be identified and listed in the Plan.
- r. Facility Inspections. The Plan shall specify the frequency of inspections. The Director may require increased inspections and Plan reevaluations as necessary. The inspection and any subsequent maintenance activities performed shall be documented, recording

date and time of inspection, individual(s) making the inspection, and a description of the facility's stormwater control systems, equipment, and systems.

- 3. To the extent practicable locate industrial materials and activities inside, or protect them with storm-resistant coverings to prevent exposure to rain, snow, snowmelt and runoff.
- 4. SWPPP Review and Modifications
  - a. The permittee must review and amend the SWPPP as appropriate whenever:
    - (i) There is construction or a change in design, operation or maintenance such that these situations have a significant impact on the discharge, or potential for discharge, of pollutants;
    - (ii) Routine inspection or compliance evaluation determines deficiencies in BMPs;
    - (iii) An inspection by a local, State, or Federal official determines that modifications to the SWPPP are necessary;
    - (iv) There is a spill, leak or other release; or any time there is an unauthorized discharge.
  - b. SWPPP modifications must be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs must be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Division. The amount of time taken to modify a BMP or implement additional BMPs must be documented.
  - c. If the SWPPP modification is the result of a release or unauthorized discharge, the permittee must document a description of the release, the date of the release; the circumstances leading to the release and actions taken in response to the release; and measures to prevent the recurrence of such releases. Such documentation shall be kept on-site for a period of five years and made available to the Director or his authorized representative immediately upon request.
  - d. The SWPPP shall be reviewed and updated on an annual basis.
  - e. A signature and date is required for the SWPPP and for any revisions to the SWPPP.
- 5. The permittee shall specify the frequency of inspections in the SWPPP. The Director may require increased inspections and SWPPP reevaluations as necessary. The inspection and any subsequent maintenance activities performed shall be documented, recording date and time of inspection, individual(s) making the inspection, and a description of the facility's stormwater control systems, equipment, and systems.
- 6. The permittee shall document SPPP related monitoring, measurements, inspections, maintenance activities, and training provided to employees and commercial tenants, a log of the sampling data, and a record of actions taken to implement BMPs associated with the industrial activities. Such documentation shall be kept on-site for a period of five years and made available to the Director or his authorized representative immediately upon request.

- 7. Non-stormwater discharges to waters of the United States that are not authorized by an NPDES permit are unlawful and must be eliminated. The SWPPP must include a certification that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-stormwater, and that all unauthorized discharges have been eliminated. The certification must be signed in accordance with Part V, Section B, Paragraph 2(d) of this permit (General Conditions, Signatory Requirements) and must include:
  - a. The date of any testing and/or evaluation,
  - b. A description of the evaluation criteria or testing method used,
  - c. A list of the outfalls or onsite drainage points that were directly observed during the test,
  - d. A description of the results of any test and/or evaluation for the presence of non-stormwater discharges, i.e., identification of unauthorized discharge(s) origin and composition,
  - e. The action(s) taken to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was rerouted to sanitary, or an NPDES permit application was submitted for a cooling water discharge.
- 8. The permittee must retain a copy of the current SWPPP required by this permit at the facility, and it must be immediately available at the time of an on-site inspection.
- 9. If a tenant obtains authorization under this permit and develops a SWPPP for discharges from the commercial tenant's own areas of the airport, that SWPPP must be coordinated and integrated with the SWPPP for the entire airport.
- 10. The Division may notify the permittee at any time that the permittee's SWPPP, the BMPs or other components of the permittee's stormwater program do not meet one or more of the requirements of this permit. The notification will identify specific provisions of this permit that are not being met, and may include required modifications to the permittee's SWPPP, stipulated deadlines, additional monitoring requirements and special reporting requirements.

## MONITORING AND REPORTING REQUIREMENTS

The permittee must perform and document semi-annual visual examination of a stormwater discharge associated with industrial activity from each outfall. The visual examination must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, the permittee is excused from the visual monitoring requirement for that quarter, provided the permittee documents that no runoff occurred.

Qualitative monitoring requires a visual inspection of each stormwater outfall regardless of representative outfall status. Qualitative monitoring is for the evaluating the effectiveness of the SWPPP and assessing new sources of stormwater pollution. Qualitative monitoring shall be performed at each stormwater discharge outfall regardless of representative outfall status. Visual examinations must be made on samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from the outfall. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch of rainfall) storm event. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if

it can be documented that less than a 72-hour interval is representative for local storm events during the sampling period. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

In the event an atypical condition is noted at a stormwater discharge outfall, the permittee shall document the suspected cause of the condition and any actions taken in response to the discovery. This documentation will be maintained on-site for a period of five years and made available to the Director or his authorized representative immediately upon request.

Visual examination reports must be maintained onsite with the SWPPP. The report must include the examination date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.

# **Additional Monitoring and Reporting Requirements**

The Stormwater Pollution Prevention Plan shall be reviewed and updated on an annual basis. Implementation of the plan shall include documentation of all sampling, measurements, inspections and maintenance activities and training provided to employees. Such documentation shall be kept on-site for a period of five years and made available to DWQ immediately upon request. If DWQ determines that a Plan does not meet requirements of the permit, the permittee must give DWQ a time schedule for modifying the Plan and certify that the Plan has been so modified.

Self-inspections of the facility and all stormwater systems shall occur at a minimum on a semi-annual schedule. The inspections and any subsequent maintenance activities performed shall be documented, recording date and time of inspection, individual(s) making the inspection and a narrative description of the facility's stormwater control system, plant equipment and systems. Records of these inspections shall be incorporated into the Plan.

A log of the sampling results and activities taken to implement BMPs associated with the vehicle maintenance activities shall be maintained and incorporated into the Plan.

# **Deicing Operations**

Facilities which conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations shall:

- Evaluate present operating procedures to consider alternative practices that would reduce the overall amount of deicing/ anti-icing chemical used and/or lessen the environmental impact of the pollutant source.
- Evaluate whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety.
- Produce and implement a plan for the minimization of the release of materials used for de-icing into the stormwater system.
- Determine annually the usage rate of deicing/anti-icing chemicals at their facility. The total amount of deicing/anti-icing chemicals used at an airport facility is the cumulative amount used by the airport authority and each commercial tenant of the airport facility. In determining the fluid amounts of deicing/anti-icing chemicals used at a facility, operators should use the predilution volume. Annual usage rate of deicing/anti-icing chemicals shall be reported annually to

the state. The Division may require facilities that conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations to apply for an individual permit.

#### EFFECTIVE DATE OF PROPOSED COMPLIANCE SCHEDULE

Permittees covered by this General Permit shall comply with Final Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

- Existing Facilities: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the initial certificate of coverage issued pursuant to this general permit and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(k) of this permit, shall be accomplished within 12 months of the effective date of the initial certificate of coverage.
- Proposed Facilities: The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(k) of this permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

# PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

There are no special conditions in the general permit.

#### BASIS FOR PROPOSED CONTROLS AND LIMITATIONS

- 1. The conditions of this draft general permit have been designed using best professional judgment to achieve water quality protection through compliance with the technology-based standards of the Clean Water Act (Best Available Technology [BAT] and Best Conventional Pollutant Control Technology [BCT]). Where the Director determines that a water quality violation is occurring and water quality-based controls or effluent limitations are required to protect the receiving waters, coverage under the general permit shall be terminated and an individual permit will be required. Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors discussed below in this fact sheet for controlling pollutants in stormwater discharges associated with the activities as described in Item 1 (Types of Discharge Covered), the draft permit proposes a set of requirements for developing and implementing stormwater pollution prevention plans, and proposes specific requirements for monitoring and reporting on stormwater discharges.
- 2. The permit conditions reflect the Environmental Protection Agency and the North Carolina pollution prevention approach to stormwater permitting. The quality of the stormwater discharge associated with an industrial activity will depend on the availability of pollutant sources. This draft general permit proposes that implementation of Best Management Practices (BMPs) and traditional stormwater management practices which control the source of pollutants meets the definition of BAT and BCT. The draft permit conditions are not numeric effluent limitations, but rather are designed to be flexible requirements for developing and implementing site specific plans to minimize and control pollutants in the stormwater discharges associated with the industrial activity.

- 3. Title 40 Code of Federal Regulations (CFR) Part 122.44(k)(2) authorizes the use of BMPs in lieu of numeric effluent limitations in NPDES permits when the agency finds numeric effluent limitations to be infeasible. The agency may also impose BMP requirements which are "reasonably necessary" to carry out the purposes of the Act under the authority of 40 CFR 122.44(k)(3). The conditions of the draft permit are proposed under the authority of both of these regulatory provisions. The pollution prevention requirements (BMP requirements) in this permit operate as limitations on effluent discharges that reflect the application of BAT/BCT. This is because the BMPs identified require the use of source control technologies which, in the context of this general permit, are the best available of the technologies economically achievable (or the equivalent BCT finding).
- 4. All facilities covered by this stormwater general permit must prepare, retain, implement, and (at a minimum of annually) update a stormwater pollution prevention plan. The term "pollution prevention" distinguishes this source reduction approach from traditional pollution control measures that typically rely on end-of-pipe treatment to remove pollutants in the discharges. The plan requirements are based primarily on traditional stormwater management, pollution prevention and BMP concepts, providing a flexible basis for developing site-specific measures to minimize and control the amounts of pollutants that would otherwise contaminate the stormwater runoff.
- 5. The pollution prevention approach adopted in the stormwater pollution prevention plans in the draft permit focuses on two major objectives: 1) to identify sources of pollution potentially affecting the quality of stormwater discharges associated with industrial activity from the facility; and 2) to describe and ensure that practices are implemented to minimize and control pollutants in stormwater discharges associated with industrial activity from the facility and to ensure compliance with the terms and conditions of this permit.
- 6. The Division believes that it is not appropriate to require a single set of effluent limitations or a single design or operational standard for all facilities which discharge stormwater associated with industrial activity. Rather, this permit establishes a framework for the development and implementation of site-specific stormwater pollution prevention plans. This framework provides the necessary flexibility to address the variable risk for pollutants in stormwater discharges associated with the industrial activities that are addressed by this permit, while ensuring procedures to prevent stormwater pollution at a given facility are appropriate given the processes employed, engineering aspects, functions, costs of controls, location, and age of facility (as discussed in 40 CFR 125.3). This approach allows flexibility to establish controls which can appropriately address different sources of pollutants at different facilities.
- 7. In 1979, EPA completed a technical survey of industry best management practices (BMPs) which was based on a review of practices used by industry to control the non-routine discharge of pollutants from non-continuous sources including runoff, drainage from raw material storage areas, spills, leaks, and sludge or waste disposal. This review included analysis and assessment of published articles and reports, technical bulletins, and discussions with industry representatives through telephone contacts, written questionnaires and site visits.
- 8. The technical survey identified two classes of pollution control measures. The first class of controls are those management practices which are generally considered to be essential to the development of an effective and efficient BMP program, low in cost, and applicable to broad categories of industries and substances. These controls include the following: developing a Spill Control Committee and implementing spill reporting, material inventorying and compatibility reviews, employee training, visual inspections, preventative maintenance programs, good

housekeeping, and addressing security issues. These practices are broadly applicable to all industries and can be implemented by each facility independent of the category of industry, ancillary sources, specific chemicals used at different sites, and/or plant site locations. The survey concluded that these controls should be minimum requirements for any effective BMP program.

- 9. The second class of controls includes management practices which provide for a second line of defense against the release of pollutants. These controls include prevention measures, containment measures, mitigation and cleanup measures and treatment methods. The types of chemicals, industrial operations and various ancillary sources specify the controls applicable to an individual facility.
- 10. The EPA and NPDES States have, on a case-by-case basis, imposed BMP requirements in NPDES permits. The EPA has also continued to review and evaluate case studies involving the use of BMPs and the use of pollution prevention measures associated with spill prevention and containment measures for oil. The development of the NPDES permit application requirements for stormwater discharges associated with industrial activity resulted from the evaluation and identification of the potential contaminants and the resultant water quality impacts of stormwater discharges from industrial sites. Public comments received during the rule making provided additional insight regarding stormwater risk assessment, as well as appropriate pollution prevention and control measures and strategies. During that time EPA again reviewed stormwater control practices and measures. These experiences have shown the Division that pollution prevention measures such as BMPs can be appropriately used and that permits containing BMP requirements can effectively reduce pollutant discharges in a cost-effective manner. BMP requirements are being appropriately imposed in general permits in lieu of numeric effluent limitations pursuant to 40 CFR 122.44(k)(2).

#### REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

There are no requested variances or alternatives to required standards.

#### THE ADMINISTRATIVE RECORD

The administrative record, including application, draft permit, fact sheet, public notice, comments received, and additional information is available by writing to:

Stormwater and General Permits Unit Division of Water Quality 1612 Mail Service Center Raleigh, North Carolina 27699-1612

The above documents are available for review and copying, between the hours of 8:00 AM and 5:00 PM Monday through Friday. Copies will be provided at a charge of 10 cents per page, at:

9th Floor Archdale Building Stormwater and General Permits Unit 512 N. Salisbury Street Raleigh, North Carolina

# **STATE CONTACT**

Additional information concerning the permit application may be obtained at the above address between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting: Mike Randall at 919/807-6374.